Abstract

[0027] The present invention is directed to an optical device for the observation and documentation of the ocular fundus and is preferably provided for fundus cameras. In order to generate a uniform illumination of the fundus by transillumination of the sclera in the illumination unit, according to the invention, for fundus cameras and/or ophthalmoscopes, the light emitted by the illumination source is coupled into individual light-conducting fibers or bundles of light-conducting fibers which extend into the area of the front lens of the fundus camera and ophthalmoscope and whose fiber ends are formed in such a way that the exiting light is projected on and transilluminates the sclera. The discomfort caused to the patient by pupil-dilating means is avoided as are the risks associated with the placement of contact lenses. Another substantial advantage of the illumination unit according to the invention is the extremely uniform, large-area illumination of the fundus, so that a correspondingly large visual field of the fundus can be observed and also documented .